

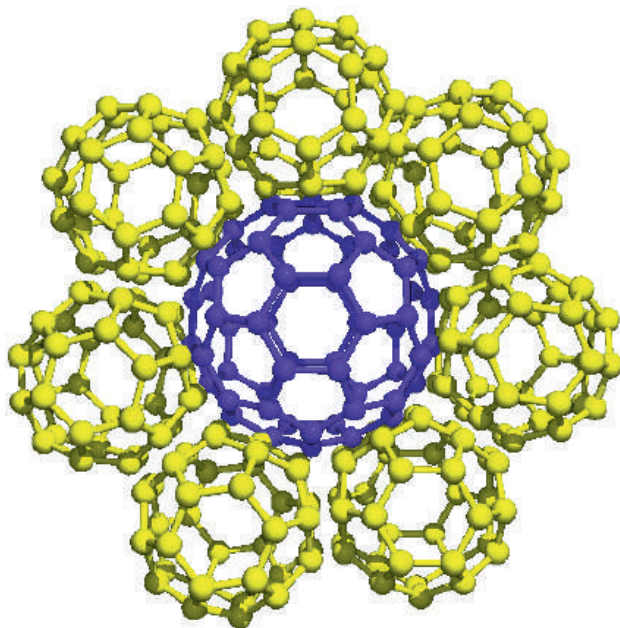


New Fullerene Species, C_{36} , Discovered

C_{36} investigated theoretically
(Cohen, Louie, Côté, Grossman, 1998)

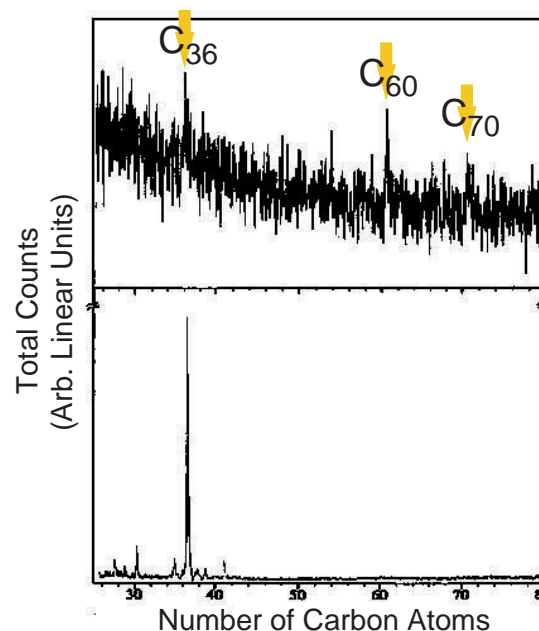
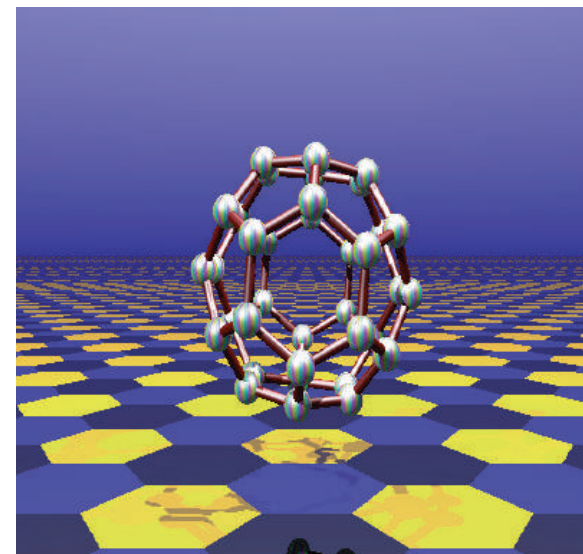


C_{36} synthesized in bulk quantities
(Piskoti, Zettl—1998)



C_{36} molecules (yellow) have higher curvature than C_{60} (blue) resulting in high reactivity and large electron-phonon coupling.

A highly strained sp^2 -bonded C_{36} cage molecule (diameter $\sim 5\text{\AA}$) is shown above a stylized hexagonal graphite surface which represents the lowest energy form of carbon.



C_{36} synthesis and purification shown in mass spectrum of crude (top) and isolated material (bottom).

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